

Mueller® Flexible Disc Check Valve



Shown with MJ x MJ ends



Shown with FL x FL ends and optional disc position indicator

Construction Specifications

Sizes: 2" through 24" flanged ends
3" through 16" mechanical joint ends

Body: Ductile Iron

Disc: Buna-N encapsulated steel

Seat: 45° non-slam seat

Features

Body

Ductile Iron in ASTM A-536 Grade 65-45-12, and features a full flow area providing 100% unrestricted flow and low head loss. Flanges are in full compliance with ANSI B16.1, Class 125.

Bonnet

Ductile iron domed access bonnet allows for easy removal and inspection of the flexible disc assembly.

Disc

The only moving part, featuring a fully Buna-N encapsulated steel disc with nylon reinforcement in the flex area. The molded elastomer with integral O-ring ensures a bubble-tight shut off, without backflow.

Body Seat

Constructed on a 45 degree angle to reduce the travel of the disc to the full open position; significantly reducing the potential for water hammer.

Flow

The flow area is equal to or greater than the equivalent pipe size throughout, resulting in low head losses, compared to other types of check valves.

Installation

Suitable for both horizontal and vertical pipelines with flow upward.

Coatings

The valve interior is fully coated with liquid thermosetting epoxy suitable for use in potable water service. The exterior is provided as standard with a universal primer enamel suitable for coating in the field. Special coatings can be furnished on request.

Accessories/Options

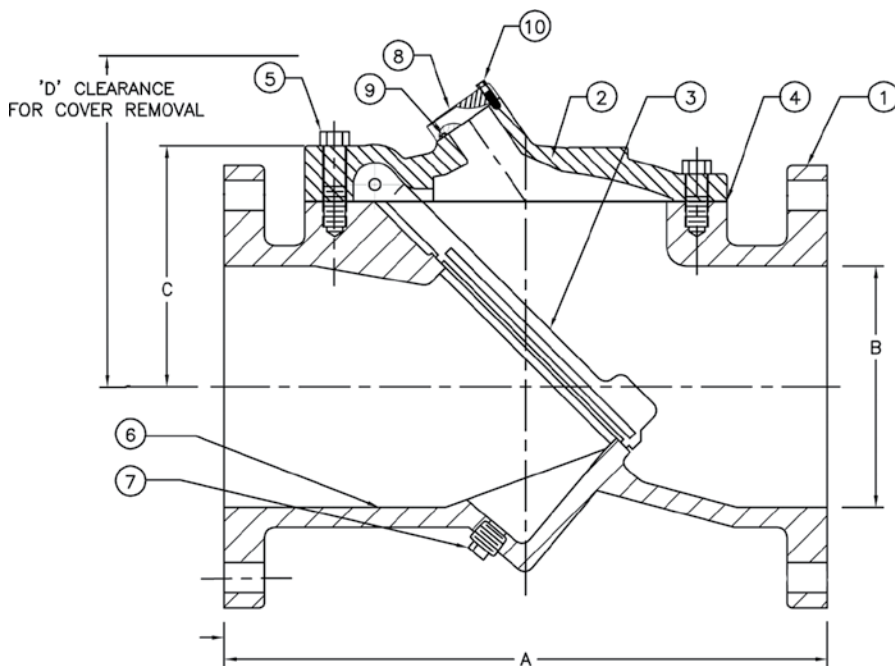
- Disc position indicator
- External backflow device - to manually open disc
- Proximity limit switch - to transmit an electrical signal to indicate when disc is open or closed
- EPDM disc option
- Stainless steel cover bolts
- Spring assisted closure

Manufactured to comply with AWWA C508, the Mueller® Flex Check Valve has only one moving part: a resilient disc reinforced with steel. This simple, innovative valve provides dependable, maintenance free performance, and quiet operation with its inherent non-slam construction. The large, unobstructed flow path makes the valve an excellent choice for wastewater as well as water applications. The design has undergone a rigorous 1,000,000 continuous cycle test with no signs of wear or distortion to the valve disc or seat. All sizes have a 250 psi rating and are NSF/ANSI 61/372 certified.

Materials of Construction

Item	Qty	Description	Material	ASTM Designation
1	1	Body	Ductile Iron	ASTM A-536-GR 65-45-12
2	1	Bonnet	Ductile Iron	ASTM A-536-GR 65-45-12
3	1	Disk	Steel/Buna-N	ASTM-A36 D2000 BK 807
4	1	Gasket	Rubber (Buna N)	D2000 BK 807
5	AR	Cap Bolts	Steel/Zinc	SAE Grade 5 - Zinc Plated
6	1	Interior Lining	Epoxy	—
7	1	Plug	Ductile Iron	ASTM A-536-GR 65-45-12
8	1	Boss Cover	Ductile Iron	ASTM A-536-GR 65-45-12
9	1	O-Ring	Rubber (Buna)	D2000 BK 807
10	4	Boss Cover Bolts	Steel/Zinc	SAE Grade 5 - Zinc Plated

Dimension 'D' Clearance Required to Remove Access Cover



Valve Size	A	B	C	D
2	8.0	2.0	3.38	8.38
2-1/2	8.5	2.5	3.38	8.38
3	9.5	3.0	3.88	9.00
4	11.5	4.0	4.63	9.63
5	13.75	5.0	5.13	10.25
6	15.0	6.0	5.88	11.00
8	19.5	8.0	7.63	13.75
10	24.5	10.0	9.88	16.00
12	27.5	12.0	11.38	18.50
14	31.0	14.0	13.38	20.50
16	32.0	16.0	15.38	23.50
18	36.0	18.0	17.13	25.25
20	40.0	20.0	19.13	29.25
24	48.0	24.0	22.75	32.75

Flanges are per ANSI B16.1 Class 125/150 Flat Faced

*Mechanical joint drawings and dimensions are available at www.muellercompany.com

